

Claims

1. A computer knowledge system, for operation in a computer environment using a plurality of hardware and software components operatively arranged for enabling a plurality of business processes, said computer knowledge system comprises:
  - 5 - a monitoring agent, arranged for collecting data providing information about the operation of said hardware and software components;
  - a relational database, storing data providing information about the operation of said business processes and error data relating to erroneous operation of said hardware and software components; and
  - 10 - a user interface, arranged for providing information about the operation of said business processes using said data collected by said monitoring agent and said data stored in said relational database,  
said relational database being arranged for providing information towards said user interface about the impact on the operation of said business processes of an erroneous operation of said hardware and software components.
2. A computer knowledge system according to Claim 1, wherein said relational database comprises data identifying functional transactions within said business processes and dependencies between functional transactions of said business processes, wherein said user interface is arranged for correlating said error data and said functional transactions data for providing said information about the impact on said business processes of an erroneous operation of said hardware and software components.
3. A computer knowledge system according to Claim 2, wherein said user interface is arranged for providing said information about said business processes indicating at least one of a group comprising:
  - 25 - the extent to which business processes are influenced by a disturbance in said software and hardware components;
  - the extent to which business processes are influenced by a functional error in said hardware and software components;
  - 30 - the extent to which business processes are influenced by a functional error in said hardware and software components, which functional error cannot directly be monitored;

- the extent to which business processes are influenced by an externally applied change, such as a predetermined change for performing impact analyses, in said hardware and software components; and

5 - the extent to which business processes are available in the case of an erroneous operation of said hardware and software components.

4. A computer knowledge system according to Claim 1, further comprising a historical database, storing historical data about erroneous operation of said hardware and software components and the impact thereof on said business processes, wherein said user interface is arranged for providing said information about the impact on said business processes of an erroneous operation of said hardware and software components using said historical data.

10 5. A computer knowledge system according to Claim 1, wherein said user interface is arranged for providing said information about the impact on the operation of said business processes of an erroneous operation of said hardware and software components in a predetermined format adapted to the user of said information.

15 6. A computer knowledge system according to Claim 1, wherein said user interface is arranged for providing said information about the impact on said business processes of an erroneous operation of said hardware and software components in terms of its impact on at least one of a group comprising:

20 - functionality of the business processes;  
- usability of the business processes;  
- maintainability of the business processes;  
- efficiency of the business processes;  
- reliability of the business processes; and  
- changeability of the business processes.

25 7. A computer knowledge system according to Claim 1, wherein said monitoring agent, said relational database and said user interface connect through a central agent.

8. A computer knowledge system according to Claim 1, wherein said monitoring agent is arranged for collecting information about the operation of said hardware and software components using at least one of a group comprising:

30 - workflow data provided by said computer environment;  
- system monitoring data; and  
- data accumulated in a data warehouse of said computer environment.

9. A computer knowledge system according to Claim 8, wherein said monitoring agent comprises a knowledge module, operating with a business flow monitor and a component monitor for collecting data providing information about the operation of said business processes and said hardware and software components.

5 10. A computer knowledge system according to Claim 9, wherein said knowledge module is arranged for collecting data with respect to at least one of a group comprising:

- availability of critical components;
- communications performance between critical components;
- critical messages in application and system log files;
- synthetic transaction from end user view;
- application and system processes;
- database and critical table(s) data availability; and
- system resource availability and performance.

10 11. A computer knowledge system according to Claim 1, wherein said user interface is arranged

15 for providing said information on an automated basis comprising at least one of a group including:

- a notification message;
- a standard report;
- an HTML page; and
- a trouble ticket.

20 12. A computer knowledge system according to Claim 11, wherein said information towards said user interface is provided on a subscription basis.

13. A computer knowledge system according to Claim 11, wherein said user interface is at least one of a group comprising:

- a computer screen;
- a mobile telephone;
- a pager;
- a fax; and
- a panel.

25 14. A computer knowledge system according to Claim 13, wherein said user interface forms part of said computer environment.

15. A computer knowledge system according to Claim 11, wherein said information towards said user interface is provided if said impact on the operation of said business processes exceeds a

predetermined threshold value.

16. A method of providing information about the operation of business processes in a computer environment using a plurality of hardware and software components operatively arranged for enabling a plurality of business processes, said method comprises:

5 - collecting data providing information about the operation of said hardware and software components;

- storing data providing information about the operation of said business processes and error data relating to erroneous operation of said hardware and software components; and

10 - providing information towards a user interface about the operation of said business processes using said collected and stored data,

15 said data are processed for providing information towards said user interface about the impact on the operation of said business processes of an erroneous operation of said hardware and software components.

17. A method according to Claim 16, further comprising identification of functional transactions within said business processes and dependencies between functional transactions of said business processes, and processing said error data in relation to said functional transactions and their dependencies for providing said information about the impact on said business processes of an erroneous operation of said hardware and software components.

18. A method according to Claim 16, wherein said information indicates at least one of a group 20 comprising:

- the extent to which business processes are influenced by a disturbance in said software and hardware components;

- the extent to which business processes are influenced by a functional error in said hardware and software components;

25 - the extent to which business processes are influenced by a functional error in said hardware and software components, which functional error cannot directly be monitored;

- the extent to which business processes are influenced by an externally applied change, such as a predetermined change for performing impact analyses, in said hardware and software components; and

30 - the extent to which business processes are available in the case of an erroneous operation of said hardware and software components.

19. A method according to Claim 16, further comprising collecting historical data about erroneous operation of said hardware and software components and the impact thereof on said business processes, wherein said information about the impact on said business processes of an erroneous operation of said hardware and software components is provided from processing said historical data.

20. A method according to Claim 16, wherein said information about the impact on said business processes of an erroneous operation of said hardware and software components is provided in terms of at least one of a group comprising:

- functionality of the business processes;
- usability of the business processes;
- maintainability of the business processes;
- efficiency of the business processes;
- reliability of the business processes; and
- changeability of the business processes.

21. A method of alerting about business functions or processes, by providing information in accordance with the method of Claim 16.

22. A method of analyzing the operation of business processes in a computer environment using a plurality of hardware and software components operatively arranged for enabling a plurality of business processes, said method comprises:

- collecting data providing information about the operation of said hardware and software components;
- storing data providing information about the operation of said business processes and error data relating to erroneous operation of said hardware and software components; and
- providing information towards a user interface about the operation of said business processes using said collected and stored data,

23. A method according to Claim 22, further comprising identification of functional transactions within said business processes and dependencies between functional transactions of said business processes, and processing said error data in relation to said functional transactions and their dependencies for providing said information about the impact on said business processes of an

erroneous operation of said hardware and software components.

24. A method according to Claim 22, wherein said information indicates at least one of a group comprising:

5 - the extent to which business processes are influenced by a disturbance in said software and hardware components;

- the extent to which business processes are influenced by a functional error in said hardware and software components;

- the extent to which business processes are influenced by a functional error in said hardware and software components, which functional error cannot directly be monitored;

10 - the extent to which business processes are influenced by an externally applied change, such as a predetermined change for performing impact analyses, in said hardware and software components; and

- the extent to which business processes are available in the case of an erroneous operation of said hardware and software components.

15 25. A method according to Claim 22, further comprising collecting historical data about erroneous operation of said hardware and software components and the impact thereof on said business processes, wherein said information about the impact on said business processes of an erroneous operation of said hardware and software components is provided from processing said historical data.

20 26. A method according to Claim 22, wherein said information about the impact on said business processes of an erroneous operation of said hardware and software components is provided in terms of at least one of a group comprising:

- functionality of the business processes;

- usability of the business processes;

25 - maintainability of the business processes;

- efficiency of the business processes;

- reliability of the business processes; and

- changeability of the business processes.

27. A computer program stored on a computer readable medium for use in a computer

30 environment and arranged for operating in accordance with Claim 1, when compiled on said computer environment.

28. A computer readable medium comprising a computer program according to Claim 27.